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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 23

Complete if Known

Application Number 10/670,980
Filing Date 09/25/2003
First Named Inventor Sreenivasan et al.
Group Art Unit 1722
Examiner Name Nguyen, Thukhanh
Attorney Docket Number P100-42-03

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
PK	B1	3,527,062		Belinski et al.	09-08-1970	
	B2	3,783,520		King	01-08-1974	
	B3	3,807,027		Heisler	04-30-1974	
	B4	3,807,029		Troeger	04-30-1974	
	B5	3,811,665		Seelig	05-21-1974	
	B6	4,062,600		Wyse	12-13-1977	
	B7	4,070,116		Frosch et al.	01-24-1978	
	B8	4,098,001		Watson	07-04-1978	
	B9	4,119,688		Hiraoka	10-10-1978	
	B10	4,155,169		Drake et al.	05-22-1979	
	B11	4,201,800		Alcorn et al.	05-06-1980	
	B12	4,202,107		Watson	05-13-1980	
	B13	4,267,212		Sakawaki	05-12-1981	
	B14	4,326,805		Feldman et al.	04-27-1982	
	B15	4,337,579		De Fazio	07-06-1982	
	B16	4,355,469		Nevins et al.	10-26-1982	
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	B19	4,440,804		Milgram	04-03-1984	
	B20	4,451,507		Beltz et al.	05-29-1984	
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	B22	4,544,572		Sandvig et al.	10-01-1985	
	B23	4,552,832		Blume et al.	11-12-1985	
	B24	4,552,833		Ito et al.	11-12-1985	
	B25	4,600,309		Fay	07-15-1986	
	B26	4,610,442		Oku et al.	09-09-1986	
	B27	4,657,845		Frechet et al.	04-14-1987	
	B28	4,692,205		Sachdev et al.	09-08-1987	
	B29	4,694,703		Routson	09-22-1987	
	B30	4,707,218		Giammarco et al.	11-17-1987	
	B31	4,724,222		Feldman	02-09-1988	
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	B33	4,737,425		Lin et al.	04-12-1988	
	B34	4,763,886		Takei	08-16-1988	
Examiner Signature	PK JS				Date Considered	9/16/05

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/670,980
				Filing Date	09/25/2003
				First Named Inventor	Sreenivasan et al.
				Group Art Unit	1722
				Examiner Name	Nguyen, Thukhanh
Sheet	2	of	23	Attorney Docket Number	P100-42-03

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
PR	B35	4,772,878		Kane	09-20-1988	
	B36	4,808,511		Holmes	02-28-1989	
	B37	4,826,943		Ito et al.	05-02-1989	
	B38	4,846,931		Gmitter et al.	07-11-1989	
	B39	4,848,179		Ubhayakar	07-18-1989	
	B40	4,848,911		Uchida et al.	07-18-1989	
	B41	4,857,477		Kanamori	08-15-1989	
	B42	4,883,561		Gmitter et al.	11-28-1989	
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	B44	4,891,303		Garza et al.	01-02-1990	
	B45	4,908,298		Hefferon et al.	03-13-1990	
	B46	4,909,151		Fukui et al.	03-20-1990	
	B47	4,919,748		Bredbenner et al.	04-24-1990	
	B48	4,921,778		Thackeray et al.	05-01-1990	
	B49	4,929,083		Brunner	05-29-1990	
	B50	4,931,351		McColgin et al.	06-05-1990	
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	B54	4,976,818		Hashimoto et al.	12-11-1990	
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PR	B68	5,151,754		Ishibashi et al.	09-29-1992	
Examiner Signature					Date Considered	8/16/85

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Application Number		10/670,980			
Filing Date		09/25/2003			
First Named Inventor		Sreenivasan et al.			
Group Art Unit		1722			
Examiner Name		Nguyen, Thukhanh			
Attorney Docket Number		P100-42-03			
Sheet	3	of	23		

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		Number	Kind Code ² (if known)				
PR	B69	5,155,749		DiMilla et al.	10-13-1992		
	B70	5,169,494		Hashimoto et al.	12-08-1992		
	B71	5,171,490		Fudim	12-15-1992		
	B72	5,173,393		Sezi et al.	12-22-1992		
	B73	5,179,863		Uchida et al.	01-19-1993		
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	B77	5,212,147		Sheats	05-18-1993		
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	B79	5,234,793		Sebald et al.	08-10-1993		
	B80	5,240,550		Boehnke et al.	08-31-1993		
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	B82	5,242,711		DeNatale et al.	09-07-1993		
	B83	5,244,818		Jokerst et al.	09-14-1993		
	B84	5,259,926		Kuwabara et al.	09-09-1993		
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	B86	5,277,749		Griffith et al.	01-11-1994		
	B87	5,314,772		Kozicki et al.	05-24-1994		
	B88	5,318,870		Hartney	06-07-1994		
	B89	5,324,683		Fitch et al.	06-28-1994		
	B90	5,328,810		Lowrey et al.	07-12-1994		
	B91	5,330,881		Sidman et al.	07-19-1994		
	B92	5,348,616		Hartman et al.	09-20-1994		
	B93	5,355,219		Araki et al.	10-11-1994		
	B94	5,357,122		Okubora et al.	10-18-1994		
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	B98	5,376,810		Hoenk et al.	12-27-1994		
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	B100	5,392,123		Marcus et al.	02-21-1995		
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	PR						
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		First Named Inventor	Sreenivasan et al.		
		Group Art Unit	1722		
		Examiner Name	Nguyen, Thukhanh		
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Sheet	4	of	23		

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		Number	Kind Code ² (if known)			
P/L	B103	5,421,981		Leader et al.	06-06-1995	
	B104	5,422,295		CHOI et al.	06-06-1995	
	B105	5,424,549		Feldman	06-13-1995	
	B106	5,425,848		Haisma et al.	06-20-1995	
	B107	5,425,964		Southwell et al.	06-20-1995	
	B108	5,431,777		Austin	07-11-1995	
	B109	5,439,766		Day et al.	08-08-1995	
	B110	5,452,090		Proglor et al.	09-19-1995	
	B111	5,453,157		Jeng	09-26-1995	
	B112	5,458,520		DeMercurio et al.	10-17-1995	
	B113	5,468,542		Crouch	11-21-1995	
	B114	5,480,047		Tanigawa et al.	01-02-1996	
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	B116	5,507,411		Peckels	04-16-1996	
	B117	5,508,527		Kuroda et al.	04-16-1996	
	B118	5,512,131		Kumar et al.	04-30-1996	
	B119	5,515,167		Ledger et al.	05-07-1996	
	B120	5,523,878		Wallace et al.	06-04-1996	
	B121	5,527,662		Hashimoto et al.	06-18-1996	
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B124	5,566,584		Briganti	10-22-1996		
B125	5,633,505		Chung et al.	05-27-1997		
B126	5,654,238		Cronin et al.	08-05-1997		
B127	5,669,303		Maracas et al.	09-23-1997		
B128	5,670,415		Rust	09-23-1997		
B129	5,700,626		Lee et al.	12-23-1997		
B130	5,723,176		Keyworth et al.	03-03-1998		
B131	5,724,145		Kondo et al.	03-03-1998		
B132	5,725,788		Maracas et al.	03-10-1998		
B133	5,726,548		Chiba et al.	03-10-1998		
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P/R	B136	5,743,998		Park	04-28-1998	

Examiner Signature		Date Considered	4/16/05
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PK	B137	5,747,102		Smith et al.	05-05-1998	
	B138	5,753,014		Van Rijn	05-19-1998	
	B139	5,760,500		Kondo et al.	06-02-1998	
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	B144	5,802,914		Fassler et al.	09-08-1998	
	B145	5,804,474		Sakaki et al.	09-08-1998	
	B146	5,808,742		Everett et al.	09-15-1998	
	B147	5,825,482		Nikooahadetal	10-20-1998	
	B148	5,855,686		Rust	01-05-1999	
	B149	5,876,550		Feygin et al.	03-02-1999	
	B150	5,877,036		Kawai	03-02-1999	
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	B152	5,884,292		Baker et al.	03-16-1999	
	B153	5,888,650		Calhoun et al.	03-30-1999	
	B154	5,895,263		Carter et al.	04-20-1999	
	B155	5,900,160		Whitesides et al.	05-04-1999	
	B156	5,907,782		Wu	05-25-1999	
	B157	5,912,049		Shirley	06-15-1999	
	B158	5,926,690		Toprac et al.	07-20-1999	
	B159	5,937,758		Maracas et al.	08-17-1999	
	B160	5,942,871		Lee	08-24-1999	
	B161	5,948,219		Rohner	09-07-1999	
	B162	5,948,470		Harrison et al.	09-07-1999	
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	B165	5,988,859		Kirk	11-23-1999	
	B166	6,033,977		Gutsche et al.	03-07-2000	
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PK	B171	6,046,056		Parce et al.	04-04-2000	
	B172	6,051,345		Huang	04-18-2000	
	B173	6,074,827		Nelson et al.	06-13-2000	
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	B175	6,088,103		Everett et al.	07-11-2000	
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	B181	6,133,576		Shafer et al.	10-17-2000	
	B182	6,137,562		Masuyuki et al.	10-24-2000	
	B183	6,143,412		Schueler et al.	11-07-2000	
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	B185	6,150,680		Eastman et al.	11-21-2000	
	B186	6,168,845	B1	Fontana, Jr. et al.	01-02-2001	
	B187	6,180,239	B1	Whitesides et al.	01-30-2001	
	B188	6,182,042	B1	Peevers	01-30-2001	
	B189	6,188,150	B1	Spence	02-13-2001	
	B190	6,204,922	B1	Chalmers	03-20-2001	
B191	6,218,316	B1	Marsh	04-17-2001		
B192	6,234,379	B1	Donges	05-22-2001		
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B196	6,309,580	B1	Chou	10-30-2001		
B197	6,316,290	B1	Wensel	11-13-2001		
B198	6,326,627	B1	Putvinski et al.	12-04-2001		
B199	6,329,256	B1	Ibok	12-11-2001		
B200	6,334,960	B1	Willson et al.	01-01-2002		
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B203	6,361,831	B1	Sato et al.	03-26-2002		
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Examiner Signature	[Signature]				Date Considered	4/16/05

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				Filing Date	09/25/2003
				First Named Inventor	Sreenivasan et al.
				Group Art Unit	1722
				Examiner Name	Nguyen, Thukhanh
				Attorney Docket Number	P100-42-03
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U.S. PATENT DOCUMENTS						
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		Number	Kind Code ² (if known)			
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	B206	6,387,787	B1	Mancini et al.	05-14-2002	
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				Examiner Name	Nguyen, Thukhanh
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		Number	Kind Code ² (if known)			
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		Number	Kind Code ² (if known)			
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Application Number	10/670,980
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First Named Inventor	Sreenivasan et al.
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Examiner Name	Nguyen, Thukhanh
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Sheet	11	of	23	Attorney Docket Number	P100-42-03

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		Office ²	Number ⁴	Kind Code ³ (if known)				
PK	B320	DE	19648844		Muller et al.	09-18-1997		
	B321	DE	2800476		Lamprecht et al.	07-13-1978		
	B322	EP	0867775		Shinji	09-30-1998		
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				Examiner Name	Nguyen, Thukhanh
				Attorney Docket Number	P100-42-03
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P/L	B358	Abstract of Japanese Patent 02-24848, January 26, 1990		
	B359	Abstract of Japanese Patent 02-92603, August 12, 2004		
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	B362	Abstract of Japanese Patent 58-129074, August 01, 1983		
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	B364	ANANTHASURESH et al., "Strategies for Systematic Synthesis of Compliant Mems.", DSC-Vol. 55-2, Dynamic Systems and Control: Volume 2, pp. 677 - 686, November 1, 1994.		
B365	ARAI et al., "Calibration and Basic Motion of Micro Hand Module.", IEEE, January 1, 1993, pp. 1660-1665.			
B366	Arai et al., "Development of a New Parallel Manipulator with Fixed Linear Actuator.", In Proceedings of Japan/USA Symposium on Flexible Automation, January 1, 1996, Vol. 1, ASME, New York, pp. 145-149.			
B367	"Photoresist Coating Methods.", E-mail from Susan Bagen (BAGEN@aol.com) to Dhaval Shah, September 18, 1997.			
P/L	B368	BENDER et al., "Fabrication of Nanostructures using a UV-based Imprint Technique.", Microelectronic Engineering 53, January 1, 2000, pp. 233-236.		

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PK	B369	BENDER et al., "Multiple Imprinting in UV-based Nanoimprint Lithography: Related Material Issues.", Microelectronic Engineering 61 – 62, January 1, 2002, pp. 407-413.	
	B370	BLOMQUIST et al., "Fluorinated Acrylates in making Low-Loss, Low-Birefringence, and Single-Mode Optical Waveguides with Exceptional Thermo-Optic Properties.", SPIE Conference on Linear Optical Properties of Waveguides and Fibers, July 1, 1999, Vol. 3799, pp. 266-279.	
	B371	BRAEUER et al., "Precise Polymer Micro-Optical Systems.", MRS Bulletin, July 1, 2001, pp. 519-522.	
	B372	CHOI et al., "Design of Orientation Stages for Step and Flash Imprint Lithography.", Precision Engineering, January 1, 2001, pp. 192-199.	
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	B374	CHOU et al., "Imprint Lithography with Sub-10 nm Feature Size and High Throughput.", Microelectronic Engineering 35, January 1, 1997, pp. 237-240.	
	B375	CHOU et al., "Imprint of Sub-25 nm Vias and Trenches in Polymers.", Applied Physics Letter, November 20, 1995, 67 (21)	
PK	B376	CHOU et al., "Lithographically Induced Self-assembly of Periodic Polymer Micropillar Arrays.", J. Vac. Sci. Technol., November 1, 1999, B 17(6), pp. 3197-3202.	
PK	B377	CHOU et al., "Nanoimprint Lithography and Lithographically Induced Self-Assembly.", MRS Bulletin, July 1, 2001, pp. 512-517.	
PK	B378	CHOU, "Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, (June 2002), pp. 835-837.	
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P/L	B380	COLBURN et al., "Step and Flash Imprint Lithography: A New Approach to High-Resolution Patterning.", Proc of SPIE, Vol. 3676.	
	B381	COWIE, "Polymers: Chemistry and Physics of Modern Materials.", 2 nd Ed., January 1, 1991, pp. 408-409	
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2K	B390	HAISMA et al., "Mold-assisted Nanolithography: A Process for Reliable Pattern Replication.", J. Vac. Sci. Technol. B, November 1, 1996, pp. 4124-4128.	

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	B391	HASHIMOTO et al., "Design and Characteristics of a Parallel Link Compliant Wrist." IEEE, May 1, 1994, Department of Mechanical Engineering, Kagoshima University, pp. 2457-2462.	
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	B396	HIRAI et al., "Mold Surface Treatment for Imprint Lithography.", Journal of Photopolymer Science and Technology, August 1, 2001, Vol. 14, No. 3, pp. 457-462.	
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	B399	HOWELL et al., "A Loop-Closure Theory for the Analysis and Synthesis of Compliant Mechanisms.", Journal of Mechanical Design, March 1, 1996, Vol. 118, pp. 121-125.	
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	B401	International Search Report for PCT/US 00/30041, October 18, 2001.	

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PK	B402	International Search Report for PCT/US 01/26049, February 19, 2002	
	B403	JOHNSON et al., "Advances in Step and Flash Imprint Lithography.", SPIE Microlithography Conference, February 23, 2003.	
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	B409	KRAUSS et al., "Fabrication of Nanodevices Using Sub-25 nm Imprint Lithography.", Appl. Phys. Lett., January 1, 1995, 67 (21), pp. 3114-3116.	
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P/K	B413	LEE et al., "Ultra Precision Positioning System for Servo Motor-piezo Actuator Using the Dual Servo Loop and Digital filter Implementation.", American Society for Precision Engineering, January 1, 1998, pp. 287-290.	
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	B417	MANSKY et al., "Large-Area Domain Alignment in Block Copolymer Thin Films Using Electric Fields.", Macromolecules, June 9, 1998, Vol. 31, No. 13, pp. 4399-4401.	
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P/K	B423	NERAC.COM Retro Search, "Imprint Lithography." October 16, 2004.	

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PK ↓	B424	NERAC.COM Retro Search, "Multi-Layer Resists.", September 2, 2004.	
	B425	NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes.", August 31, 2004.	
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PK ↓	B427	NGUYEN, "Asymmetric Fluid-Structure Dynamics in Nanoscale Imprint Lithography." The University of Texas at Austin, August 1, 2001, pp. 1-111.	
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	B429	OTTO et al., "Characterization and Application of a UV-based Imprint Technique.", Microelectronic Engineering 57 - 58, January 1, 2001, pp. 361-366.	
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	B432	PAROS et al., "How to design Flexure Hinges.", Machine Design, November 25, 1965, pp 151-156.	
	B433	PENG et al., "Compliant Motion Control of Kinetically Redundant Manipulators.", IEEE Transactions on Robotics and Automation, December 1, 1993, Vol. 9, No. 6, pp.831-837.	
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PK	B435	PHYSIK INSTRUMENTS, "Hexapod Six-Axis Parallel Kinematics Robot", Nano Positioning, January 1, 1998, pp. 8.4 – 8.5.	
PK	B436	PHYSIK INSTRUMENTS, "NanoPositioning, MicroPositioning, Piezo Technology.", PI Online Catalog, January 1, 1999, www.physikinstruments.com.	
	B437	PHYSIK INSTRUMENTS, "Product Catalog for Micropositioning", 1997 <i>NOT CONSIDERED see app resp filed 7/21/05</i>	
PK	B438	RAIBERT et al., "Hybrid Position/Force Control of Manipulators.", Journal of Dynamic Systems, Measurement, and Control, June 1, 1981, Vol. 102, pp. 126 – 133.	
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	B440	RONG et al., "Dynamics of Parallel Mechanism with Direct Compliance Control.", IEEE, January 1, 1997, pp. 1753-1758.	
	B441	ROOS et al., "Abstract of Nanoimprint Lithography with a Commercial 4 Inch Bond System for Hot Embossing", Proceedings of SPIE, October 1, 2001, Vol. 4343, pp. 427-435	
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Examiner Signature	<i>PK B. K.</i>	Date Considered	4/16/08
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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/670,980
				Filing Date	09/25/2003
				First Named Inventor	Sreenivasan et al.
				Group Art Unit	1722
				Examiner Name	Nguyen, Thukhanh
Sheet	21	of	23	Attorney Docket Number	P100-42-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PK	B446	SLOCUM, "Precision Machine Design: Macromachine Design Philosophy and Its Applicability to the Design of Micromachines.", Micro Electro Mechanical Systems, February 4, 1992.	
	B447	SOWAH, "Diamond Used to Break the Mould [online].", [Retrieved on Sept. 2, 2003.] Retried from the Internet: <URL: http: HTTP://eetuk.com/showArticle.jhtml?articleID=19203691>, 9/18/02.	
	B448	SRINIVASAN et al., "Alkyltrichlorosilane-Based Self-Assembled Monolayer Films for Stiction Reduction in Silicon Micromachines.", Journal of Microelectromechanical Systems, June 1, 1998, Vol. 7, No. 2, p. 252-260.	
	B449	STEWART, "A Platform With Six Degrees of Freedom.", Proc Instn Mech Engrs, May 28, 1965, Vol 180, Pt1, No. 15, pp. 371-378.	
	B450	STIX, "Getting More from Moores", Scientific American, 4/2001.	
	B451	TAJBAKHSI et al., "Three-Degree-of-Freedom Optic Mount for Extreme Ultraviolet.", American Society for Precision Engineering, January 1, 1998, pp. 359-362.	
	B452	TANIKAWA et al., "Development of Small-sized 3 DOF Finger Module in Micro Hand for Micro Manipulation.", Proc. of IEEE, March 1, 1999, Intl. conf. on Intelligent Robots and Systems, pp. 876-881.	
	B453	TOMITA et al., "A 6-axes Motion Control Method for Parallel-Linkage-Type Fine Motion Stage.", JSPE-58-04, pp. 118-124., 11/11/2002	
	B454	Translation of Japanese Patent 02-24848, January 26, 1990.	
	B455	Translation of Japanese Patent 02-92603, April 3, 1990.	
PK	B456	TRILOGY SYSTEMS, "Linear Motors 310.", www.trilogysystems.com, January 1, 2001.	

Examiner Signature	<i>[Signature]</i>	Date Considered	4/16/05
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2/16	B457	UCHIDA et al., "A Mask-to-Wafer Alignment and Gap Setting Method for X-ray Lithography Using Graftings.", Journal Vacuum Science Technology, November 1, 1991, B 9 (6), pp. 3202-3206.	
	B458	US Application No. 09/698,317, Filed 10-27-2000, CHOI et al., "High Precision Orientation Alignment and Gap Control Stages for Imprint Lithography Processes."	
	B459	US Application No. 10/463,396, Filed 06-17-2003, CHOI et al., "Method to Reduce Adhesion Between a Conformable Region and a Pattern of a Mold."	
	B460	US Application No. 10/614,716, Filed 07-07-2003, SREENIVASAN et al., "A Conforming Template for Patterning Liquids Disposed on Substrates."	
	B461	US Application No. 10/687,519, Filed 10-16-2003, TRUSKETT et al., "Low Surface Energy Templates."	
	B462	US Application No. 10/687,562, Filed 10-16-03, CHERALA et al., "Applying Imprinting Material to Substrates Employing Electromagnetic Fields."	
	B463	US Application No. 10/760,821, Filed 01-20-2004, SREENIVASAN et al., "Method for Concurrently Employing Differing Materials to Form a Substrate."	
	B464	US Application No. 10/785,248, Filed 02-24-2004, CHOI et al., "A Method to Control the Relative Position Between a Body and a Surface."	
	B465	US Application No. 10/788,700, Filed 02-27-2004, SREENIVASAN et al., "Full-Wafer or Large Area Imprinting with Multiple Separated Sub-Fields for High Throughput Lithography."	
2/16	B466	US Application No. 10/864,214, Filed 6-9-04, SREENIVASAN et al., "An Imprint Lithography System to Produce a Light to Impinge upon and Polymerize a Liquid in Superimposition with Template Overlay Marks."	
	B467	Not considered see app resp filed 7/21/05 US Application No. 60/394,458, Filed 07-08-2002, SREENIVASAN et al., "Method and Apparatus for Whole Wafer Planarization using Optical Flats and Light Curable Liquids."	

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<i>PL</i>	B468	US Applications No. 10/616,294, Filed 07-09-2003, CHOI et al., "Systems for Magnification and Distortion Correction for Imprint Lithography Processes."	
<i>PL</i>	B469	VANDERBILT, "VU9730 Specifications for Improved Flexure Device.", Vanderbilt University Office of Transfer Technology, 101, 25, 192-199, 01/01/2003.	
<i>PL</i>	B470	WANG et al., "Passive Compliance versus Active Compliance in Robot-Based Automated Assembly Systems.", Industrial Robot, January 1, 1998, Vol. 25, No. 1, pp. 48-57.	
	B471	WHITE et al., "Novel Alignment System for Imprint Lithography.", J. Vac. Sci. Technol. B 18(6), November 1, 2000, pp. 3552-3556.	
	B472	WILLIAMS et al., "Six Degree of Freedom Mag-Lev Stage Development.", SPIE, January 1, 1997, Vol. 3051, pp. 856-867.	
	B473	WU, "Large Area High Density Quantized Magnetic Disks Fabricated Using Nanoimprint Lithography.", J. Vac. Sci. Technol., November 1, 1998, B 16(6), pp. 3825-3829.	
	B474	XIA et al., "Soft Lithography.", Angew. Chem. Int. Ed., January 1, 1998, pp. 551-575.	
<i>PL</i>	B475	XIA et al., "Soft Lithography.", Annu Rev. Mater. Sci., 1998, 28: 153-184.	

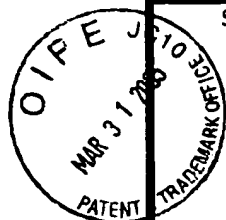
Examiner Signature	<i>PL-B-K</i>	Date Considered	4/16/05
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 5

Complete if Known

APPLICATION NUMBER	10/670,980
FILING DATE	09/25/2003
FIRST NAMED INVENTOR	Sreenivasan et al.
Group Art Unit	1722
Examiner Name	Nguyen, Thukhanh T.
Attorney Docket Number	P100-42-03

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
PLC	C1	6,517,977	B2	Resnick et al.	2/11/2003	
	C2	2002/0177319	A1	Chou	11/28/2002	
	C3	6,518,189	B1	Chou	2/11/2003	
	C4	6,828,244	B2	Chou	12/7/2004	
	C5	5,737,064		Inoue et al.	4/7/1998	
	C6	2004/0197843	A1	Chou et al.	10/7/2004	
	C7	2004/0156108	A1	Chou et al.	8/12/2004	
	C8	2004/0137734	A1	Chou et al.	7/15/2004	
	C9	2004/0131718	A1	Chou et al.	7/8/2004	
	C10	2004/0118809	A1	Chou et al.	6/24/2004	
	C11	2004/0046288	A1	Chou	3/11/2004	
	C12	2003/0080472	A1	Chou	5/1/2003	
	C13	2003/0034329	A1	Chou	2/20/2003	
	C14	2002/0042027	A1	Chou et al.	4/11/2002	
	C15	6,636,311	B1	Ina et al.	10/21/2003	
	C16	6,383,888	B1	Stirton	5/7/2002	
	C17	2004/0033515	A1	Cao et al.	2/19/2004	
	C18	10/666,527		Bailey et al.	9/18/2003	See app resp 7/21/05

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Date
Considered

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				FIRST NAMED INVENTOR	Sreenivasan et al.
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PK	C19	5,999,245		Suzuki	12/7/1999	
	C20	6,630,410	B2	Trapp et al.	10/7/2003	
	C21	6,580,172	B2	Mancini et al.	6/17/2003	
	C22	4,722,878		Watakabe et al.	2/2/1988	
PK	C23	2002/0175298	A1	Moniwa et al.	11/28/2002	
	C24	10/706,537		Sreenivasan et al.	11/12/2003	NOT CONSIDERED
	C25	10/833,240		Watts et al.	4/27/2004	
	C26	10/895,214		Voison	7/20/2004	SEE App Resp Filed 7/21/05
	C27	10/917,761		McMackin et al.	8/13/2004	
	C28	11/051,941		McMackin et al.	2/4/2005	
	C29	11/000,321		Nimmakayala et al.	11/30/2004	
PK	C30	4,512,848		Deckman et al.	4/23/1985	
	C31	6,388,755	B1	Zhao	5/14/2002	
	C32	6,295,120	B1	Miyatake	9/25/2001	
	C33	6,049,373		Miyatake	4/11/2000	
	C34	6,285,439	B1	Miyatake	9/4/2001	
	C35	6,791,669	B2	Poon	9/14/2004	
PK	C36	6,517,995	B1	Jacobson et al.	2/11/2003	

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PR	C45	WO	02/07199		Chou	1/24/2002		
	C46	WO	2004/114016		Chou et al.	12/29/2004		
	C47	WO	99/05724		Chou et al.	2/4/1999		
	C48	WO	03/010289		Chou et al.	2/6/2003		
	C49	WO	03/079416		Chou	9/25/2003		
PR	C50	WO	03/099536		Chou et al.	12/4/2003		

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PK	C51	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technology B 14(16), pp. 4129-4133, 11/1/1996	
	C52	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001	
	C53	Resnick et al., High Resolution Templates for Step and Flash Imprint Lithography, Journal of Microlithography, Microfabrication, and Microsystems. Vol 1. No. 3., 10/1/2002	
	C54	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001	
	C55	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001	
	C56	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000	
	C57	Wronosky et al., Wafer and Reticle Positioning System for the Extreme Ultraviolet Lithography Engineering Test Stand, Emerging Lithography Technologies, Proceedings of SPIE Vol. 3997, pp. 829-839, 7/1/2000	
PK	C58	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers	

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PTO/SB/D8A (08-03)

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				APPLICATION NUMBER	10/670,980
				FILING DATE	09/25/2003
				FIRST NAMED INVENTOR	Sreenivasan et al.
				Group Art Unit	2851
				Examiner Name	Kim, Peter B.
				Attorney Docket Number	P100-42-03
Sheet	1	of	3		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
PK	D1	6,665,119		Kurtz et al.	12/16/2003	
	D2	6,842,229		Sreenivasan et al.	1/11/2005	
	D3	6,190,929		Wang et al.	2/20/2001	
	D4	6,049,373		Miyatake	4/11/2000	
	D5	2005/0061698		Sreenivasan et al.	3/10/2005	
	D6	2005/0064344		Bailey et al.	3/24/2005	
	D7	2005/0084804		Truskett et al.	4/21/2005	
	D8	2005/0098534		Sreenivasan et al.	5/12/2005	
↓	D9	6,902,853		Sreenivasan et al.	6/7/2005	
PK	D10	6,890,688		Mancini et al.	5/10/2005	

Examiner Signature	<i>PK JB K</i>	Date Considered	8/29/05
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				Group Art Unit	2851
				Examiner Name	Kim, Peter B.
				Attorney Docket Number	P100-42-03
Sheet	2	of	3		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Citation No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

PK	D11	SHIBUICHI ET AL., Super Water- and Oil-Repellent Surfaces Resulting from Fractal Structure, Journal of Colloid and Interface Science, Vol. 208, no. 1, pp. 287-294 12/1/1998	
	D12	APPLICATION NO. 10/833,240, naming Inventors Watts et al., entitled Compliant Template for UV Imprinting, filed 4/27/2004	
	D13	APPLICATION NO. 10/895,214, naming Inventors Volson, entitled Imprint Alignment Method, System, and Template, filed 7/20/2004	
	D14	APPLICATION NO. 10/917,761, naming Inventors McMackin et al., entitled A Moat System for an Imprint Lithography Template, filed 8/13/2004	
	D15	APPLICATION NO. 11/051,941, naming Inventors McMackin et al., entitled Imprint Lithography Template to Facilitate Control of Liquid Movement, filed 2/4/2005	
	D16	APPLICATION NO. 11/000,321, naming Inventors Nimmakayala et al., entitled Interferometric Analysis Method for the Manufacture of Nano-Scale Devices, filed 11/30/2004	
	D17	PARK ET AL., Aligning Liquid Crystals Using Replicated Nanopatterns, PSI Scientific Report 2002, Vol VII, p. 85 3/1/2003	
↓	D18	TANIGUCHI ET AL., Diamond Nanoimprint Lithography, Nanotechnology, 2002, vol. 13, no. 5, pp. 592-596(5) 1/1/2002	
PK	D19	KIYOHARA ET AL., Abstract of Plasma Etching of CVD Diamond Films using an ECR-type Oxygen Source, http://www.iop.org/EJ/abstract/0957-4484/10/4/304 9/26/2003	

Examiner Signature		Date Considered	8/29/05
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				APPLICATION NUMBER	10/670,980
				FILED DATE	09/25/2003
				FIRST NAMED INVENTOR	Sreenivasan et al.
				Group Art Unit	2851
				Examiner Name	Kim, Peter B.
				Attorney Docket Number	P100-42-03
Sheet	3	of	3		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

gh	D20	APPLICATION NO. 11/136,897, naming inventors Miller et al., entitled Imprint Lithography Template Having a Coating to Reflect and/or Absorb Actinic Energy, filed 5/25/2005	

Examiner Signature	<i>Peter B. Kim</i>	Date Considered	8/29/05.
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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	IMPRINT LITHOGRAPHY TEMPLATE HAVING OPAQUE ALIGNMENT MARKS						
Application Number :	10/670980						
Confirmation Number:	8096						
First Named Applicant:	Sidlgata Sreenivasan						
Attorney Docket Number:	P100-42-03						
Art Unit:	1722						
Examiner:	Thukhanh T Nguyen						
Search string:	(5737064).pn						
US Patent Documents							
<i>COPY</i>							
Note: Applicant is not required to submit a paper copy of cited US Patent Documents							
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5737064	1998-04-07	Inoue et al.			
Signature							
Examiner Name				Date			